TPI TURFGRASS PRODUCERS INTERNATIONAL

Turfgrass Producers International

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<u>E-Newsletter</u>

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Hello! Can anybody hear us? Does anybody really care?

A recent survey of NFL players conducted by the National Football League Players Association (NFLPA) during September through November 2010 revealed that 69.4% of the players prefer natural grass to 14.3% who prefer an artificial surface. 9% of the players surveyed indicated they had no preference.

When asked which surface do they think is more likely to contribute to injury 82.4% selected artificial turf.

When asked which type of field was more likely to cause soreness and fatigue 89.1% chose artificial turf.

And when asked which surface was most likely to shorten their career, artificial turf received 89.7% of the votes.

In a hard-hitting and competitive sport such as professional football in which the average career is only 3.3 years, and often shortened due to injury, it's easy to understand why the athletes would be concerned about their health and how a playing surface can take a serious toll on their bodies.

A total of 1619 active NFL Players from all 32 teams voluntarily filled out the survey. Overall natural turfgrass fields were preferred over artificial fields almost 5 to 1. When it comes to playing surfaces, NFL players prefer natural turfgrass to artificial turf almost 5 to 1.



Another revealing aspect of the survey, 74.7% of the players indicated that NFL grounds keepers played a very significant role on the performance of natural turfgrass playing fields and only 23.7% believed groundskeepers played a very significant role when it came to the playing surface performance of artificial turf fields.

As more and more colleges and high school sports fields consider artificial turf, one has to wonder, when it comes to the health concerns of athletes, is anyone listening? Does anybody really care?

Turfgrass Producers International E-Newsletter

Golf & Sports Turf

Turfgrass is a positive sequesterer of carbon

BY TODD LAYT - as featured in Golf & Sports Turf Australia



Its official! Turf tested positive as a carbon sequesterer in three different studies. One study found turf sequestrates between four to seven times as much carbon as a modern mower discharges. The others were less clear on amounts, but all three studies show turf could be one of the biggest crops when it comes to sequestrating carbon, based on the sheer volume of land under turf cultivation.

This is great news for golf courses and other sporting facilities. The days of turf professionals cowering to environmentalists over negative press must cease. It is time we fight back with science on our side.

Turf is one of the best filters for heavy metals. Fifteen square meters of lawn produces enough oxygen for a person to breath, and turf is 20 degrees cooler than fake plastic grass on a 40 degree day and 30 degrees cooler than dark colored concrete. The only bad thing they could really say about turf is that mowers pollute, and turf uses too much water. We now have three studies that declare turf is carbon positive, and two studies that show warm season turf uses less water than many ornamental plantings.

Unfortunately many less reputable environmentalists will not let science and facts get in the road of a compelling yet misleading media beat up. But if turf professionals all over the country let their clients know about this new research, and how turf is such a good guy, turf will get the good rap it deserves.

Studies and analysis

"Technical Assessment of the Carbon Sequestration Potential of Managed Turfgrass in the United States" is a research report by Dr. Ranajit (Ron) Sahu. The key findings in this report are that an average maintained lawn sequestrates four times the carbon compared to the carbon output of a typical modern lawn mower used in maintaining the lawn. If one compares a well-managed lawn to a poorly managed lawn or unmanaged grasslands, the net carbon intake of a well-managed lawn is five to seven times higher than the carbon output of mowing.

Not surprisingly, certain maintenance methods resulted in higher carbon benefits. The research showed the largest amount of carbon intake occurs with the recycling of nitrogen contained in grass clippings; meaning, leave clippings on the ground to break down and recycle. The study also found that the carbon sequestration of turfgrasses can be maximized by measures such as cutting regularly and at the appropriate height, feeding with nutrients left by grass clippings, watering in a responsible way, and not disturbing grass at the root zone – all these measures help grass actively pull pollutants from the air, creating a greater carbon benefit. (Sounds like most golf course facilities I know.) The full paper can be found at: http://multivu.prnewswire.com/broadcast/33322/33322cr.pdf

Another research paper delved deeper into all inputs that go into maintaining lawns, including higher than average fertilizer and water inputs. The controversial study conducted by the University of California, Irvine made critical errors in its calculation. These were big errors that totally changed the outcome of the research. Numerous peer reviews did not pick up the mistakes. Firstly it presented the data with the incorrect information, and said that turf was a net polluter. Luckily vigilant people in the turf industry picked these mistakes up, and contacted the university. Soon after, it issued an updated version of the paper.

The University of California, Irvine acknowledged a computation error in its recently released study entitled, "Carbon Sequestration and Greenhouse Gas Emissions in Urban Turf." The initial findings blamed common turf grass for contributing to global warming, but it was discovered the findings were based on incorrect data from other experts.

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Turfgrass is a positive sequester of carbon — cont'd from page 2



Upon review of the report, various flaws were highlighted. When the computations were corrected, it was found that turfgrass is actually a net sequesterer of carbon dioxide, reversing the conclusions of the original report, although the calculations regarding the amount of fertilizer used in the report were still very high compared to what other research has found. A study by Scotts showed fertilizer use is far less than was assumed in this study.

The Irvine study also wrongly assumed all lawns are irrigated regularly. "The grass in your backyard is working hard to keep us cool, soak up carbon, capture particulates, produce oxygen, capture rain water and reduce run-off," says Kris Kiser, executive vice president of Outdoor Power Equipment Institute (OPEI), an international trade association. OPEI also noted that the University of California, Irvine study did not acknowledge the dramatic reductions of emissions and fuel use profile for today's petrol and diesel equipment, nor did the study disclose what model equipment and corresponding fuel use numbers were used.

Other research shows it also over estimated the amount of fertilizer used on lawns. Still, when the study was revised with correct data, it did show that turfgrass is a net carbon sequesterer. Unfortunately the report got more publicity when the environmentalist websites and many media organizations thought turf was a polluter, and very little when other researchers blew the whistle and realized the mistake, and found that turf is carbon positive.

A paper by Gina Nicole Zirkle, Environment and Natural Resources, Ohio State University, Columbus, titled, "The Potential for Soil Organic Carbon Sequestration in Home Lawns" suggested that results support the conclusion that lawns are a positive net sink for atmospheric CO2 under all evaluated levels of management practices. Further the paper suggested that in an average home landscape, trees sequestrate about 7 to 14 percent of the carbon; shrubs about 1 to 2 percent of the carbon; and turf approximately 80 to 90 percent of the carbon. It also suggested that when a tree dies, most of the carbon escapes back to the atmosphere, whereas turf generally keeps the carbon in the soil.

This paper can be found at: <u>http://acs.confex.com/</u> <u>crops/2009am/webprogram/Paper52288.html</u> (or) <u>http://</u> <u>etd.ohiolink.edu/send-pdf.cgi/Zirkle%20Gina%20N.pdf?</u> <u>osu1267189156</u>



"Turfgrass sequesters four times the amount of carbon compared to the emissions of a modern lawn mower."

Communication

So far, three scientific studies show turf is carbon positive. So how do we get this message across? Simple. If many green keepers make a simple poster based on the Dr. Rmajit study, saying that turf sequesters four times the amount of carbon compared to the emissions of a modern lawn mower, and display it in as many places as possible around their sporting facilities, large numbers of people will get the message that turf is a good guy.

It would be even better if a turf association made a poster that people could put up. The benefits for the sporting facilities would be extremely positive. Governments, lobby groups, and the facility users would all see turf in a different way.

cont'd on page 4

Turfgrass is a positive sequester of carbon - cont'd from page 3



The turf industry now has research it can use to lobby governments and hopefully get a better deal for turfgrass facilities. Based on this recent research, turf is one of the largest carbon positive resources in Australia and we should be lobbying to have any carbon scheme recognize this.

People who criticize turf will still point to turf needing lots of water. Research shows turf is one of the most water wise plants. A study by the University of Western Sydney, showed that warm season turf has watering requirements about the same as native plants, and [natural] turf accounted for much less water than exotic gardens.

A recent US study conducted in dry, hot Texas showed that warm season turf can survive on no water in hot summers for 60 days and return to health within a month or two when the water is reinstated.

In another comprehensive study, University of Florida researchers carefully documented water use in a buffalo grass (Stenotaphrum secundatum) lawn and an adjacent native (to the United States) mixed species landscape. In year one the lawns used significantly more water than the surrounding native landscape. In year two, the turf still used more than the adjacent shrubs although at a much lower rate than year one. But by year three there was no difference between the lawn and the plants. In year four the plants used more than double the amount of water compared to the turf. As turf professionals you know this through instinct. As turf ages, it needs far less water. The reference to this study is: Park, DM and Cisar, JL 2005, "Documenting water use from contrasting urban landscapes – turf vs. ornamentals". It was published in TPI Turf News, May/June 2005: pp. 38-42.

The research listed in this article supports the notion that turf is one of the most environmentally friendly urban planting systems available. As an industry, we need to communicate this to the public, or suffer in silence the bad press that turf often receives from uninformed commentators.

Turfgrass Producers International would like to express its appreciation to **Betty Tanddo**, Managing Editor—Projects, Glenvale Publications for permission to reprint this article in it's entirety. RE: Golf & Sports Turf Australia, February 2011.

NOTE: Minor changes were made to spelling to accommodate US readers. Photos provided by — Jim Novak (TPI)

Mark Your Calendar

TURFGRASS GOLD 2011 TPI SUMMER CONVENTION & FIELD DAYS July 18-21, 2011 Grand Sierra Resort RENO, NV

Field Day at Western Turf



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TurfSide-UP





<u>http://inhabitat.com/grass-foryour-home-or-office-desk/#more-</u> 24468

Bringing Mother Nature Indoors

Need a scent that will relieve you of everyday stress? Something natural that serves as a pick-me-upper? Here's an idea that can bring the fragrance of natural grass just about anywhere.

The natural grass squares and packaging featured to the left were designed at the Shenkar College of Engineering and Design, Israel, by Uri Romano and Assaf Yogev of <u>nine99 Design</u> and were designed to combine nature and architecture.

The entire project is made from recycled materials along with natural grass and tries to merge the home with the outdoors. The packages have an air opening to gain longer shelf life for the natural grass. The minimalistic design and logo is intended to give a flowing, "breathing" feel with elegance and life-style.

The grass squares would be fairly easy to grow and would only need a little water and sun light. They would be ideal for the home or office. You might even find trimming the grass with a pair of scissors somewhat therapeutic and relaxing. The concept is especially ideal for apartment dwellers who would like to have a little bit of nature indoors.

The product is still in the development stages even though the designers have received numerous requests for the product.



Ohio Designates Last Week in May as Turfgrass Week

In the June 2010 issue of the TPI E-Newsletter we reported that the Ohio Turfgrass Foundation was seeking a legislative proclamation naming the last week of May as Ohio Turfgrass Week.

It was announced in late January 2011 that they achieved their goal and the state of Ohio has officially designated an "Ohio Turfgrass Week," in order to increase awareness of the turfgrass industry and the importance of turfgrass to the state's economy and environment.

The Ohio Revised Code 5.2239 says, "The General Assembly finds that the turfgrass industry in this state employs thousands of people and generates billions of dollars in revenue each year. The General Assembly also finds that turfgrass acts as an environmental filter absorbing pollutants such as carbon dioxide and sulfur dioxide and prevents soil erosion."

The idea was initiated in early 2005 and a bill was signed on Dec. 23, 2010 by now former Governor, Strickland just before he left office.

During the last week in May, the Ohio Turfgrass Foundation and other industry groups will promote the benefits of turfgrass, as well as the industry.

TPI extends congratulations to the Ohio Turfgrass Federation for their diligence and persistence in getting this legislative proclamation passed and for helping turfgrass get the recognition it justly deserves.

Ever Wonder What Happens to an Artificial Field Following a Flood?





Photos: Warwick Daily News

When the town of Warwick in Queensland, Australia was hit with record rains in January the consequences were devastating to the entire community. While much of the damage is still being assessed the destruction of artificial sports fields was undeniable and the cost for repairs will be numbing to the community.

The Warwick Hockey Association is now faced with the financial task of recovering from the devastation after its new synthetic field was ripped up and destroyed by flood waters.

"They had just resurfaced it and it's basically a total loss," Cr Neil Meiklejohn, of Southern Downs Regional Council, said. "It's probably half-amillion-dollar loss with the field alone. "There is probably about another \$100,000 damage here and the \$25,000 (State Government) grant just isn't enough." (as reported by Gerard Walsh in the Warwick Daily News).

The field was used for both hockey and rugby leagues, but for now sporting activities are on hold. Warwick Hockey and the rugby teams have both vowed to continue with plans for the season. Until further notice hockey in Warwick will be played on natural turf this season.

Sporting venues in Chinchilla, Jandowae and St George, Queensland also reported damage.

"It's worth noting that natural turfgrass can also be damaged during such flooding, but the consequences are less severe because natural turf has the ability to repair itself."

- Kirk Hunter, Executive Director, Turfgrass Producers International



Your best salesman just might be your customer

Consumers often use various websites and social media to rate hotels, restaurants, retailers, airlines, etc., but they don't often rate turfgrass producers . . . or do they?

Yelp, Inc. is a Web 2.0 company that operates a social networking, user review, and local search web site of the same name. Over 25 million people access Yelp's website each month, putting it in the top 100 of U.S. Internet web sites.





"Gotta say - reviewing a grass company is new for me - but these guys did a good job for me today ... closer to home, and their St. Augustine sod was nice ... and the guy outside helped me load it into my SUV and once I got it home, it laid out nicely in my yard."

Jeff E.—Austin, TX

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An on-going series featuring photos and copy from TPI member websites.

Jasperson Sod Farm, Inc. Franksville, Wisconsin

http://www.jaspersonsod.com/default.html

JASPERSON SOD FARM, INC.



Company Profile

Jasperson Sod Farm started in 1959 with 2 acres of Merion Bluegrass. Today we have over 750 acres of sod in production. We grow several types of Bluegrass blends for home lawns, sports turf, and golf courses.

The Benefits of Jasperson Sod



A professional sod lawn needs no special care because it is a healthy mature lawn when installed, whereas a sprigged or seeded lawn requires years of nurturing to reach maturity.

Sod is grown under expert supervision from top quality certified sod seed. After it's been installed, just water, mow and fertilize your sod lawn as needed and it will remain a healthy, green carpet of grass, requiring very little maintenance.

Delivery



At Jasperson Sod we deliver your new lawn direct from our fields to your yard. Our forklift deliveries will make the job of installation much easier for you. The pallets can be spotted around

your yard for quick and convenient installation.

Proud Member of Turfgrass Producers International



Turfgrass Producers International E-Newsletter

File under—Worthy of revisiting

When it comes to erosion control materials turfgrass sod is the winner.

Runoff and Sediment Losses from Natural and Man-Made Erosion Control Materials

E. C. Krenitsky, M. J. Carroll, R. L. Hill and J. M. Krouse

Dept. of Natural Resource Sciences and Landscape Architecture, Univ. of Maryland, College Park, MD 20742-4452

Man-made erosion control materials are increasingly being used at construction sites. The performance of these materials in comparison to natural materials is largely unknown. A rainfall simulation study was designed in which four man-made materials (wood excelsior, jute fabric, coconut fiber blanket, and coconut strand mat) and two natural materials (straw and [turfgrass] sod) were evaluated. The erosion control materials were evaluated on a Sassafras loamy sand (fine loamy, mixed mesic Typic Hapludult) having an 8% slope and on a Sassafras sandy clay loam (fine, silty, mixed mesic Typic Hapludult) having a 14 to 21% slope. Disturbed soil surface areas were covered with each material and subjected to a simulated rainstorm. Runoff and sediment loss rates were determined every 5 min for 35 min after recording the time required for runoff initiation.

Turfgrass sod was the only material that extended the time required for runoff initiation. Runoff from all materials was less than bare soil for the first 5 min of runoff; however, only straw, jute, and [Turfgrass] sod reduced runoff over the entire storm event.

The total amount of runoff, compared with bare soil, was decreased by 61% for [turfgrass] sod, 25% for straw, and 16% for

jute. Erosion control materials reduced bare soil erosion by 80 to 99%. Of the man-made erosion control materials, only jute reduced runoff and sediment losses at both locations. Therefore, of the materials tested, only sod, straw, and jute would be expected to effectively reduce both runoff and sediment losses



http://www.upstateforever.org/newsviews_other/Dirt09_23_04/Runoff%20and%20sediment%20losses%

Feeling a bit creative? Submit an IDEA!!!

You Tube

Be imaginative, creative, informative, educational and while you're at it, toss in a little humor too!



Q: What kind of ideas do you want?

A: Any subject that helps the viewer gain a better understanding of the benefits of natural turfgrass, home lawn maintenance, or information on water conservation, sound management practices, natural grass vs. artificial turf, etc. Use your imagination.

Q: Do I have to be a scriptwriter?

A: Nope! Just submit an idea and we'll take it from there. Make it informative and suggest how it can be entertaining. If you want to try writing a script, go right ahead, but keep it simple. We don't have a multi-million dollar budget, only some loose pocket change.

Q: Who is the target audience?

A: Viewers of You Tube vary in age considerably so you want to appeal to young and old alike. If you have an idea that might appeal to gradeschoolers or teens, that's fine. If you have an idea that might appeal to soccer moms, that's fine too! You don't have to limit yourself.

The premiere of the first two installments of a planned series of entertaining and informative educational vignettes at TPI's Midwinter Conference were well received and are scheduled to be posted on You Tube beginning in March.

The Lawn Institute is inviting readers of the TPI E-Newsletter to submit script ideas for consideration. Who knows, we just might produce your idea. If we produce your submission you will receive recognition in the TPI E-Newsletter, *Turf News* magazine and see your idea developed and posted on "You *Tube*".

Q: What is the desired running time?

A: Ideally we're looking for short vignettes that run approximately thirty-seconds to a minute. But if you have a clever 10 to 15-second idea we would like to see it; and if you have an idea that might take a little longer, we're open to that too!

Q: Are we limited to the two muppet-like characters pictured above?

A: No. If you have an idea that calls for different characters such as kids, a professor, a teacher, a mom or dad, or even a coach. Let us know and we'll see what we can do.

Q: **Can my children submit ideas?** A: Absolutely!

Q: Where do I send my idea (s)? A: Submit ideas to Jim Novak:

jnovak@TurfGrassSod.org.

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Golfpreserves usca

The Lawn Institute joins the USGA in purchasing a Carbon Certificate to support turfgrass carbon sequestration research.

When **Michael P. Kenna, Ph.D**., director of Green Section Research for the United States Golf Association (USGA) recently announced that the USGA was among the first to purchase a Carbon Certificate of 1,000 metric tons of carbon dioxide from Golfpreserves for \$10,000 to help support golf course carbon sequestration research on golf courses he asked The Lawn Institute and others in the green industry to join in the effort.

In response to that request, TPI's Executive Director, **Kirk Hunter** has announced that the Board of Trustees of The Lawn Institute has approved the purchase of a Carbon Certificate of 500 metric tons of carbon dioxide from Golfpreserves for \$5,000.

A portion of the certificate's proceeds help to support the Colorado Golf Carbon Project, under the direction of the US Department of Agriculture (USDA) and Colorado State University to determine the carbon footprint of turfgrass. The balance of the funds will be used to assess and verify carbon sequestered by Colorado golf courses, as well as publicize the program through the internationally acclaimed public relations firm of Crispin, Porter & Bogusky*.

In making the announcement Hunter commented, "The Lawn Institute is excited to be part of a program that highlights one of the many benefits and ecosystem services of natural turfgrass. It is our hope that the Colorado Golf Carbon Project serves as a successful pilot that can be



expanded nationwide in an effort to support environmental research and help establish and communicate the economic and environmental value of carbon that is sequestered by turfgrass."

Kenna commented, "The goals of this program are to recognize the ecosystem value of golf courses; promote a positive story about golf to the world, and develop a needed funding mechanism for environmental research. It is also are hope that other green industry associations, foundations and corporations will participate in this program so we can all benefit from the research it will provide."

Numerous organizations, associations and companies have already shown their support. The USDA will match with federal funding (approximately \$70,000 per year to the Colorado project.

About Golfpreserves®

Golfpreserves® is a carbon sequestration program for the golf course industry. As an aggregator, Golfpreserves® will facilitate the assessment, quantification, confirmation and creation of carbon financial instruments. The proceeds from sold carbon financial instruments will be invested in research focusing on carbon sequestration, energy conservation, environmentally improved turfgrass, and environmental stewardship. www.golfpreserves.com.

* About Crispin Porter 🕀 Bogusky

Crispin, Porter & Bogusky (CP+B) will be responsible for publicizing the Golfpreserves project.

The following list represents a partial sampling of some of the clients this international company has represented: Burger King, Old Navy, Microsoft, Kraft, American Express, MetLife and Best Buy.

CP+B was named Agency of the Decade by Advertising Age in 2010.

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A Sincere THANK YOU St. Louis Sod Producers Association donate over \$3,000 to The Lawn Institute.

Kirk Hunter, executive director of The Lawn Institute was recently informed by Ed Keeven, Jr. of Emerald View Turf Farms in O'Fallon, Missouri that the St. Louis Sod Producers Association had been dissolved and the association voted for all funds to be donated to The Lawn Institute to educate people on the benefits of turfgrass and to help fund turfgrass research.

Hunter expressed the Foundation's sincere appreciation to Keeven and all the members of the St. Louis Sod Producers Association for their generous support of The Lawn Institute.





Doug and **Sharon Fender** of *Ultimate Travel Adventures, Inc.*

South Africa & Zimbabwe, Spain & Portugal, Italy, Iceland, Denmark, Norway and Sweden to name but a few

Hunter announced that the TPI Board had voted to reinstate the TPI Study Tour program at their meeting during the 2011 TPI Midwinter Conference in Orlando, FL. The Board also selected Ultimate Travel Adventures as the preferred provider.

Hunter noted that the Board recognized there were numerous benefits to a formalized study tour program that included:

- Providing active and retired members a means to visit farms and turfgrass facilities in many areas around the world.
- Expanding TPI's membership in many countries while serving to increase the amount of knowledge and information that could be shared worldwide.
- Exposing non-members to the many values of TPI membership while demonstrating its leadership on important topics such as water and pesticide usage; taxation; equipment innovations and marketing techniques.

Turfgrass Producers International Reinstates TPI Study Tours

TPI's Executive Director, Kirk Hunter announced that TPI's study tours which had been a tradition for more than 20 years will be reinstated in 2011.

It was back in 1986 when TPI first organized escorted study tours to numerous destinations around the world. Over that period of time TPI members, their families, friends and others had an opportunity to visit such scenic locations as Australia & New Zealand, England & Scotland, Austria & Netherlands, China & Hong Kong, Chile & Argentina, South Africa & Zimbabwe.

- Encouraging the development of long-lasting friendships with fellow members.
- · Identifying future leaders in the industry.

Ultimate Travel Adventures (UTA) is owned and operated by Doug Fender, who served as TPI's executive director for more than 20 years prior to his retirement. Fender was initially responsible for introducing the TPI Study Tour back in the mid 80's. TPI's most recent study tour was in 2008, when 25 TPI members and others enjoyed an educational and scenic 18-day tour of Iceland, Denmark, Norway and Sweden.

TPI study tours planned for the future will continue to include components that appeal to TPI members such as multiple turf farm tours; visits to research centers; turf-covered sports facilities; private and public gardens; behind-the-scenes visits to popular tourist attractions and special opportunities for members and nonmembers alike to become better acquainted so they can develop lasting friendships.

As in the past, preference will be given to current TPI members; however, non-members will be accepted on a space-available basis once member demand has been satisfied. Typically, a tour group consists of 30 to 40 people (mostly husbands and wives and their children) with the tour lasting from 12 to 18 days.

Tentative plans are now being developed for the 2011 TPI Study Tour to Southern Africa this fall. Details are expected to be released shortly. While still in its preliminary phase, it likely stops will include Johannesburg, Cape Town and one or more African game parks such as Kruger National Park. Visits to area turf farms, plant nurseries and sports facilities such as those used by the 2010 World Cup of Soccer are also part of the planned itinerary.

Study Tour details will be published by TPI in *Turf News* magazine, the TPI E-Newsletter and posted on the TPI website. Additional information will also be available by calling the TPI office (847-649-5555) or contact Doug Fender direct at the UTA office. Phone: +224-848-9617; Fax: +224-484-8099 or email: <u>Doug@UltimateTravelAdventures.com</u>. You can also visit UTA's website: <u>www.UltimateTravelAdventures.com</u> and it's Face Book